

Work Order ID 83244

April-16-12 11:07:12 AM

83244

Page 1

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/04/16 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2750	F								
D3492	C								
100		0.00							

100

DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy blue file and type labels per PPP D350-636-014 CHG 006

100
0.00

S.264/20

for MLJ 12-6-19

1383244RH

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Work Order ID 83244*April-16-12 11:07:12 AM****83244***

Page 2

Item ID: D350-636-014**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Item Name:** Skidtube RH**Stop*****NS2*****Start Date:** 16/04/2012 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 30/04/2012 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run Start*****NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110	Skidtubes	0.00							
Skidtubes	Memo								
Skidtubes	1- Pick D2600-3 Bent								
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750								
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.								
	4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting								
	5- Drill only two fwd step holes using DT9616. Ensure proper positioning.								
	6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-4 details). Drill using drill Jig DT8150 & DT8864A for first side only DT8864B for second side (detail B)								
	7- Clecko DT8864B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE***								
	8- Open up holes for SECTION AW-AW to 0.375" (2 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open holes for ground handling and detail T to 0.500" (8 holes per side)								
	9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".								
	10-Open up holes of Detail A to 0.297" (total of 2 holes per side)								

83244 160424

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action - Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Work Order ID 83244

April-16-12 11:07:12 AM

83244

Page 3

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left
from bending as per QSI 004

A/R Aluminum Rod batch: M120854

12-Grind welds flush as per Dwg D2750

120

120

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

5/26/25

130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

5/26/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83244

April-16-12 11:07:12 AM

83244

Page 4

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

Chemical Conversion Coat per QSI005 4.1

0.00

MG 12-4-25

140

HandFinish

Hand Finishing

150

QC3- Inspect Part Finish

0.00

1 0 8E12-04-26

150

QC

Quality Control

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action / Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Work Order ID 83244

83244

April-16-12 11:07:12 AM

Page 5

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
QC:		Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
160	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes section BE-BE 0.500" (4 per side) as per dwg D2750								
	2-Open holes section BC-BC 0.3125" (4 per side)								
	3-Open up holes of Detail AB and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.								
	4-Chamfer holes of section BE-BE, BC-BC, AB and ground handling (welding instructions on sheet 11)								
	5-Deburr and blow out all chips from inside of tube. Prepare tube for welding, remove alodine as required.								
	6-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: <u>M121221</u> exp. date: <u>13-1-4</u>								
	7- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 11) A/R Aluminum Rod batch: <u>M120854</u> <u>325-12-04-30</u>								
	8-Grind welds flush as per Dwg D2750								
	9-Spot face ground handling holes (total of 4 places per side) as per dwg D2750								
	10-Deburr holes								

1 0 CF 12-4-26

325-12-04-30

Def/CC 12-4-30

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83244

April-16-12 11:07:12 AM

83244

Page 6

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

170

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

5/16/07

180

180

QC
Quality Control

QC5- Inspect part completeness to step on W/O

0.00

5/16/07

8/07

190

190

HandFinish

Pressure Wash per QSI005 4.3

0.00

5/16/07

Hand Finishing

Memo

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1

x

(2P)

12/05/07

W/O:

83244

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-536-04 PAR #: _____ Fault Category: Landing gear/skid tube NCR: Yes No DQA: Date: 12/06/28
 Resolution: Rework Disposition: Re work QA: N/C Closed: Date: 12/16/29

WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/06/28	# 170	Found out inspection that the 15 th + 16 th hole are missing when tested to the standard. R.C. Drills /Reamed when weldy	AP 12.06.02 DKW/HZ	Drill out + ream with x-10 ft spaces Replace 202743 B Re-weld Re-drill holes AS per 202743			AP 12.06.02 DKS/HZ	S 12/06/28
				A/R GRIND metal flush + Debur OPENED HOLES to $\phi 0.49$ ACCEPTABLE (PZ 05.03)	12-2-15	BE 12-02-15	AP 12.06.02 DKS/HZ	S 12/06/28

NOTE: Date & initial all entries

Work Order ID 83244

April-16-12 11:07:12 AM

83244

Page 7

Item ID: D350-636-014

Accept

Revision ID:

Item Name: Skidtube RH

Start Date: 16/04/2012 Start Qty: 1.00 ***1***Required Date: 30/04/2012 Req'd Qty: 1.00 ***1******N900040100***

Setup

Start

NS1

Stop

NS2**Reference:**

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2**Sequence ID/
Work Center ID**

200

200
Powdercoat

Powder Coating

W121134

**Operation
Description**

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

**Set Up/
Run Hours**

0.00

Tool ID

Tool #

**Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

1X 4

M-k
12/05/08

210

210
QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

7:45 0.00
320.05
8:15

1R+ 4 12/05/08

0.00

Inspect for foreign object per QSI 024

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83244

83244

April-16-12 11:07:12 AM

Page 8

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230

230

HandFinish

Hand Finishing

HandFinishing

0.00

Memo

0.00

1-Install inserts as per dwg D2750
2-assemble o'ring as per dwg D3492 and apply o'ring lube
A/R 55-o'ring lube batch: 110348

3-Assemble tube hardware as per dwg D2750 sikaflex batch: 12121 13/01

4-Inspect For Foreign Objects

5-Spray inside of tube with "LPS-3" batch: N/A

6-Install blade fitting D3488-041, wearshoe
SIKA FLEX 241

BATCH: 12121

EXP DATE: 13/01

7-assemble o'ring to plug as per dwg D3492 and apply o'ring lube
A/R 55-o'ring lube batch: 110348

8-Coat all exposed fasteners with "LPS Procyon" batch: 14596

RH

8

PP

12/05/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/06/03	#230	Found During Assembly that D3488-041/042 Doesn't Align with Slid tube RL tol on D3488-041/042 + Human Drilling Process	GP 12/06/04	Drill out at 5 aft mark holes to max tol on Slid tube	GP 12/06/04	S 12/06/04	GP 12/06/04	S 12/06/03
			GP 12/06/04	Drill out at 5 holes to max tol on D3488				
			GP 12/06/04	touch up Slid tube as per QSZ005 + Re Assembly	GP 12/06/04		GP 12/06/04	S 12/06/03

NOTE: Date & initial all entries

Work Order ID 83244

83244

Page 9

April-16-12 11:07:12 AM

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 <i>S. Hobbs</i> 0.00							
250 *250* Packaging Packaging	Pick Kit Memo	0.00							<i>ok to go</i> <i>SP</i>
260 *260* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 <i>S. Hobbs</i> 0.00							

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83244

83244

Page 10

April-16-12 11:07:13 AM

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube RH

Stop

NS2

Start Date: 16/04/2012 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 30/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 *270* Packaging	Packaging	0.00							12/6/2012
	Memo	0.00	Reo T						
	Package as per PPP D350-636-014		doc 22						

280
280
QC

Quality Control

QC21- Final Inspection - Work Order Release 0.00

Memo 0.00

12/6/2012

MWS 12/06/2012

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B				Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:16 AM

Page 1

Work Order ID: 83244

83244
D350-636-014

Parent Item: D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:H02.09.25Rearranged procedure stepsKJ

IPP Rev:I05.12.08Rearranged procedure stepsEC

IPP Rev:J06.03.30Per rev. D EC

IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

IPP Rev:M 08-09-23 revF as per dwg DD verified by:ec IPP Rev:N

10.06.22 revise seq110 DD verf:EC IPP Rev:O 10.10.01 as per IIN revH DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-3-BENT		Manufactured	No			110	Each	23.0000	1	1			

D2600-3-BENT

Extrusion Bent

883305

**

D 883305 12-04-24

Location	Loc Qty	Loc Code
LG	23	
66875	7	
73253	1	
75021	1	
75022	1	
75023	1	
81330	4	
82347	8	

D2739

Manufactured No

160 Each 6.0000

**

① CF 12-4-26

D2739

350 I Beam

383449

Location	Loc Qty	Loc Code
LG	6	
72155	1	
81508	1	
82123	2	
82124	2	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:16 AM

Page 2

Work Order ID: 83244

Parent Item: D350-636-014

Parent Item Name: Skidtube RH

83244
D350-636-014

Start Date: 16/04/2012

Start Qty: 1.00

Required Date: 30/04/2012

Required Qty: 1.00

D2743

Manufactured No

160

Each

281.0000

8

8

**

D2743

Crossbolt Spacer

BE12-04-30

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	-3	
81965	207	<i>X</i>
LG001	284	<i>X</i>
67766	4	
68251	3	
73403	64	
74445	1	
79517	2	

D2744

Manufactured No

160

Each

30.0000

1

1

**

D2744

Cap

BE12/04/24

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG002	30	
62715	1	
70881	1	
78900	28	<i>1</i>

D3490-1

Manufactured No

160

Each

64.0000

4

4

**

D3490-1

Cross Bolt Spacer

BE12-04-30

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	55	
81976	55	<i>4</i>
LG001	9	
62450	2	
74875	4	
77042	3	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:16 AM

Page 4

Work Order ID: 83244

83244
D350-636-014

Parent Item: D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

Purchased

No

230

Each

1,456.000

34

34

**

34

(20)

12/05/08

AN3C5A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001 (21444✓	7	
115835	7	
ST350	1449	
116419	28	
117343	13	
117764	7	
117872	2	
119749	23	
120423	376	
1210168	500	
121255	500	

AN3C6A

Purchased

No

230

Each

481.0000

4

4

(20)

12/05/08

AN3C6A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	1	
111982	1	
ST351	480	
111982	2	
116419	23	
116549	2	
116704	12	
117619	10	
117688	1	
117872	5	
118422	13	
119449	21	
120423	3	
120693✓	388	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:16 AM

Page 5

Work Order ID: 83244

Parent Item: D350-636-014

Parent Item Name: Skidtube RH

83244
D350-636-014

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN6C44A

Purchased

No

230

Each

154.0000

4

4

**

4

(28)

12/05/08

AN6C44A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	2	
103964	2	
ST343	152	
120143	25	
120465	16	
121013	11	
121167✓	100	

AN8C35A

Purchased

No

230

Each

99.0000

1

1

**

1

(28)

12/05/08

AN8C35A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	98	
115960	1	
117834	2	
118286✓	45	
121275	50	
ST346	1	
114442	0	
115188	0	
115960	1	

AN960C10L

NAS1149C0332

Purchased

No

230

Each

0.0000

38

38

**

38

(28)

12/05/08

AN960C10I

washer

April-16-12 11:07:17 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 6

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2745

Manufactured No

230

Each

8.0000

8

8

**

8

(28)

12/05/08

D2745

Bushing

Location Loc Qty Loc CodeFP 81964✓
79518

6

6

FP001
69529
76142

2

1

1

D3488-042

Manufactured No

230

Each

12.0000

1

1

**

12

(28)

12/05/08

D3488-042

Blade Fitting Assembly, RH

Location Loc Qty Loc CodeFP002 82258✓
62003
75068
77015

12

1

8

3

D3492-1

Manufactured No

230

Each

101.0000

8

8

(28)

12/05/08

D3492-1

Plug

Location Loc Qty Loc CodeFP002 51541✓
69531
74444
76235

14

8

2

4

FP-A
81963

87

87

83048

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83244

April-16-12 11:07:12 AM

Item ID: D350-636-014

Accept

Revision ID:

Item Name: Skidtube RH

Start Date: 16/04/2012 Start Qty: 1.00

1

Required Date: 30/04/2012 Req'd Qty: 1.00

1

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

200

200
Powdercoat

Powder Coating

W121134

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

IX 4

M-k
12/05/08

Memo

7:45 0.00
START TIME: 320 °F
OVEN TEMPERATURE: 8:15

210

210
QC

Quality Control

QC3- Inspect Part Finish

0.00

IRH

12/05/08

Memo

Inspect for foreign object per QSI 024

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 8

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Manufactured

No

230

Each

21.0000

3

3

**

3

12/05/08

D3537-1

Wearpad

Location Loc Qty Loc Code

FG 81362✓ 10

79833 10

FP002 11

69817 5

80337 4

81361 2

D3631-1

Manufactured

No

230

Each

187.0000

8

8

**

8

12/05/08

D3631-1

Washer

Location Loc Qty Loc Code

FG 83588✓ 100

81874 100

ST072 87

68062 2

75548 85

D3672-1

Manufactured

No

230

Each

1,016.000

8

8

**

D3672-1

Phenolic Washer

Location Loc Qty Loc Code

FP001 34

66821 34

ST060 982

72229 4

76277 478

80369 500

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 9

Work Order ID: 83244

83244
D350-636-014

Parent Item: D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3791-1

Manufactured No

230

Each

21.0000

1

1

**

D3791-1

Wearplate

~~XXXX~~~~(P)~~

12/05/08

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	83392	21
62239		2
78897		3
82168		16

D3793-1

D3793-1

Wearshoe

D 3791-1

83392

Gasket

230

Each

21.0000

1

1

**

~~(P)~~

12/05/08

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	83393	21
78901		5
82171		16

D3793-3

D3793-3

Wearshoe

D 3791-1

230

Each

26.0000

1

1

**

~~(P)~~

12/05/08

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001		23
80434		11
82166		12
FP002		3
78935		3

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 10

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3794-1

Manufactured No

230

Each

35.0000

1

1

**

1 (RP) 12/05/08

D3794-1

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	23	
82167	23	
FP002	12	
75042	4	
80435	8	

D3794-3

Manufactured No

230

Each

19.0000

1

1

**

1 (RP) 12/05/08

D3794-3

Gasket

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	19	
74530	2	
80436	17	

MS21043-6

Purchased No

230

Each

745.0000

4

4

**

4 (RP) 12/05/08

MS21043-6

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	
ST301	725	
112314	19	
117887	6	
118384	200	
120308	500	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B				Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 11

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

MS21083C8

Purchased

No

230

Each

148.0000

1

1

1

12/05/08

MS21083C8

NUT

Location Loc Qty Loc Code

304	121185 ✓	100	
	121349	50	
		50	
FP002		1	
	115884	1	
ST303		5	
	115884	0	
	118077	1	
	119309	2	
	119638	2	
ST304		42	
	120731	17	
	121011	25	

NAS1149C0832R

Purchased

No

230

Each

288.0000

1

1

1

12/05/08

NAS1149C0832R

WASHER

Location Loc Qty Loc Code

ST297		288	
	114915 ✓	288	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 12

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased No

230 Each 170.0000

4 4

**

4

(SP)

12/05/08

***NAS1515H3L ***

WASHER

Location Loc Qty Loc Code

FG	40	
102472	40	
ST277	130	
118686	3	
119438	1	
120360	76	
121243	50	

NAS1611-005

Purchased No

230 Each 204.0000

8

8

**

8

(SP)

12/05/08

NAS1611-005

O-RING

Location Loc Qty Loc Code

FP001	204	
106099	31	
114220	105	
119438	68	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 13

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

NAS1611-010

Purchased

No

230

Each

219.0000

8

8

**

8

12/05/08

NAS1611-010

O-RING

Location Loc Qty Loc Code

FP 12145✓ 10

110915 0

120770 10

FP001 209

110915 14

117460 8

118077 1

118612 3

119438 47

120986 50

121166 36

121259 50

AN8C21A

AN8C21A

BOLT

Purchased

No

250

Each

119.0000

2

2

**

2

12/05/18

Location Loc Qty Loc Code

ST343 119

118758 3

120094 26

121067 20

121167 20

121275 50

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 14

Work Order ID: 83244

83244

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2741

Manufactured No

250

Each

60.0000

1

1

**

✓*D2741*

Blade, 350 Skidtube

SP

SP

Location	Loc Qty	Loc Code
----------	---------	----------

ST	-10	
----	-----	--

ST466	70	
-------	----	--

71856	1	
-------	---	--

76984	19	
-------	----	--

79516	40	
-------	----	--

--	--	--

D3493-1

Manufactured No

250

Each

87.0000

2

2

**

12/4/18

SP

✓*D3493-1*

Washer

Location	Loc Qty	Loc Code
----------	---------	----------

ST050	87	
-------	----	--

70697	2	
-------	---	--

77573	4	
-------	---	--

78835	40	
-------	----	--

82023	41	
-------	----	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

--	--	--

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

April-16-12 11:07:17 AM

Page 15

Work Order ID: 83244

83244
D350-636-014

Parent Item: D350-636-014

Parent Item Name: Skidtube RH

Start Date: 16/04/2012

Required Date: 30/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased No

250 Each 148.0000 2 2

**

M121349

SP

MS21083C8

NUT

Location Loc Qty Loc Code

304	100	
121185	50	
121349	50	
FP002	1	
115884	1	
ST303	5	
115884	0	
118077	1	
119309	2	
119638	2	
ST304	42	
120731	17	
121011	25	

NAS1149D0863J

Purchased No

250 Each 209.0000 2

**

2 12/10/13

SP

NAS1149D0863J

WASHER

Location Loc Qty Loc Code

ST298	209	
118078	34	
119307	75	
120308	100	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	53244
Description: Blade Fitting	Part Number:	3488-042
Inspection Dwg: 3488 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Measured by:		Audited by:		Preliminary Approval:	
Date:	12-06-12	Date:	12/06/12		Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
	4	4		D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 8) WELD PER DART QSI 004
- 9) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- 10) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL 
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL 

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 03244 MLJ

12/04/16

RELEASED
68-07-14

F	INCORPORATE DS1 9413. QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-1/3-35 (ZN C8-1); D3791-1/3 REQUIRES D3536-1/3-35 (ZN B8-1); ADD D3791-1 (ZN C8-1). WEARSHOE HOLES UNDER FWD/RAFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C18-9, 10, 11). ADD NOTE 12 AND 13 (ZN A6-1). REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/N157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	
MFG. APPR.		REV. F	
APPROVED		D2750	
DE APPR.		SHEET 1 OF 11	
DATE	08.07.16	TITLE	
		350 SKIDTUBE ASSEMBLY	
		NTS	
		COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. ALL RIGHTS RESERVED. THIS DRAWING IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS TO BE USED FOR THE PURPOSE FOR WHICH IT WAS ISSUED AND IS NOT TO BE COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

4

3

2

1

D

D

C

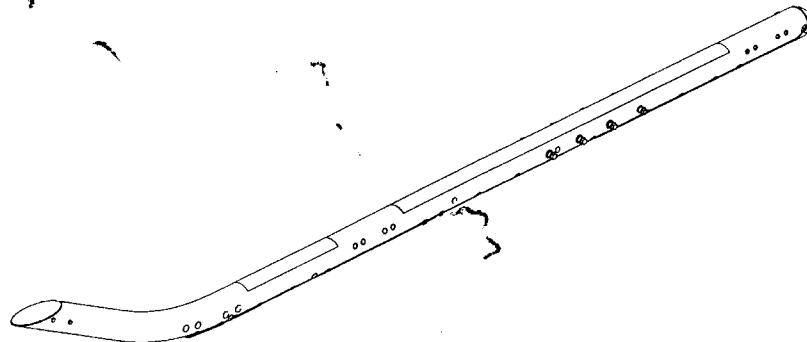
C

B

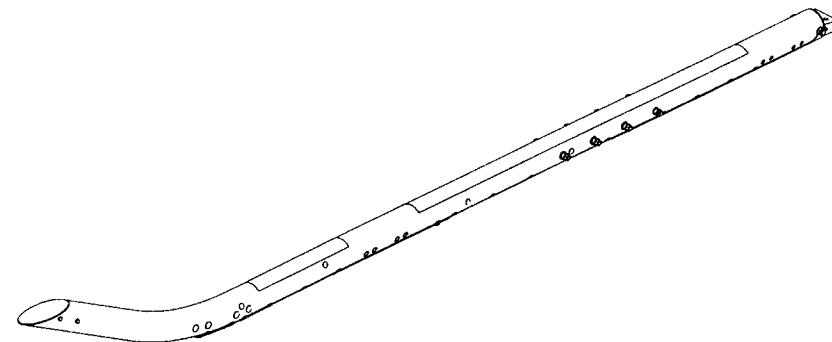
B

A

A



D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED
08-09-2014

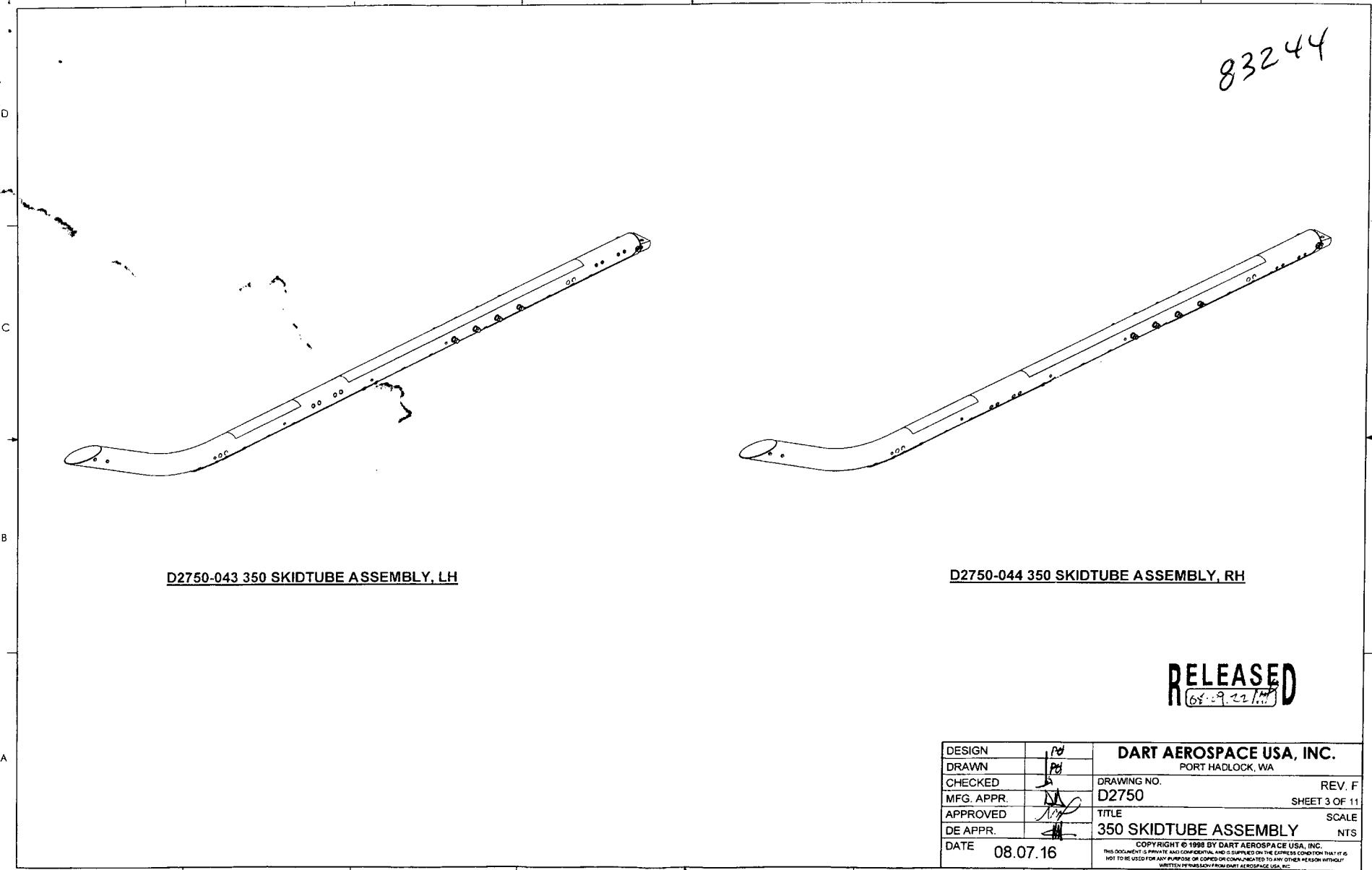
DESIGN	<i>PAJ</i>	DART AEROSPACE USA, INC.	
DRAWN	<i>PAJ</i>	PORT HADLOCK, WA	
CHECKED	<i>PAJ</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>PAJ</i>	D2750	SHEET 2 OF 11
APPROVED	<i>PAJ</i>	TITLE	SCALE
DE APPR.	<i>PAJ</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

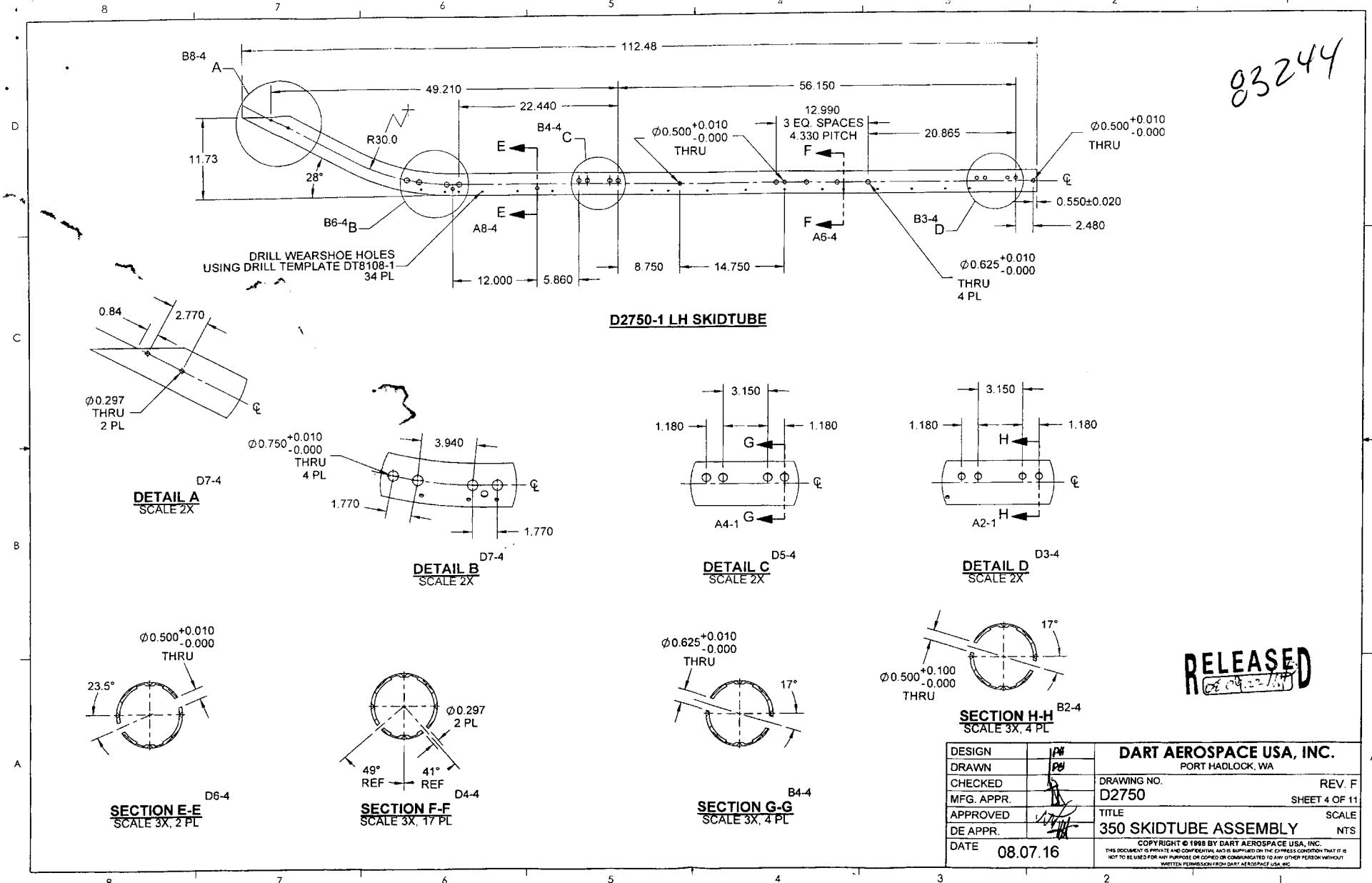


W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	IP
DRAWN	IP
CHECKED	IP
MFG. APPR.	IP
APPROVED	IP
DE APPR.	IP
DATE	08.07.16

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

DRAWING NO. D2750 REV. F
SHEET 4 OF 11

TITLE 350 SKIDTUBE ASSEMBLY NTS

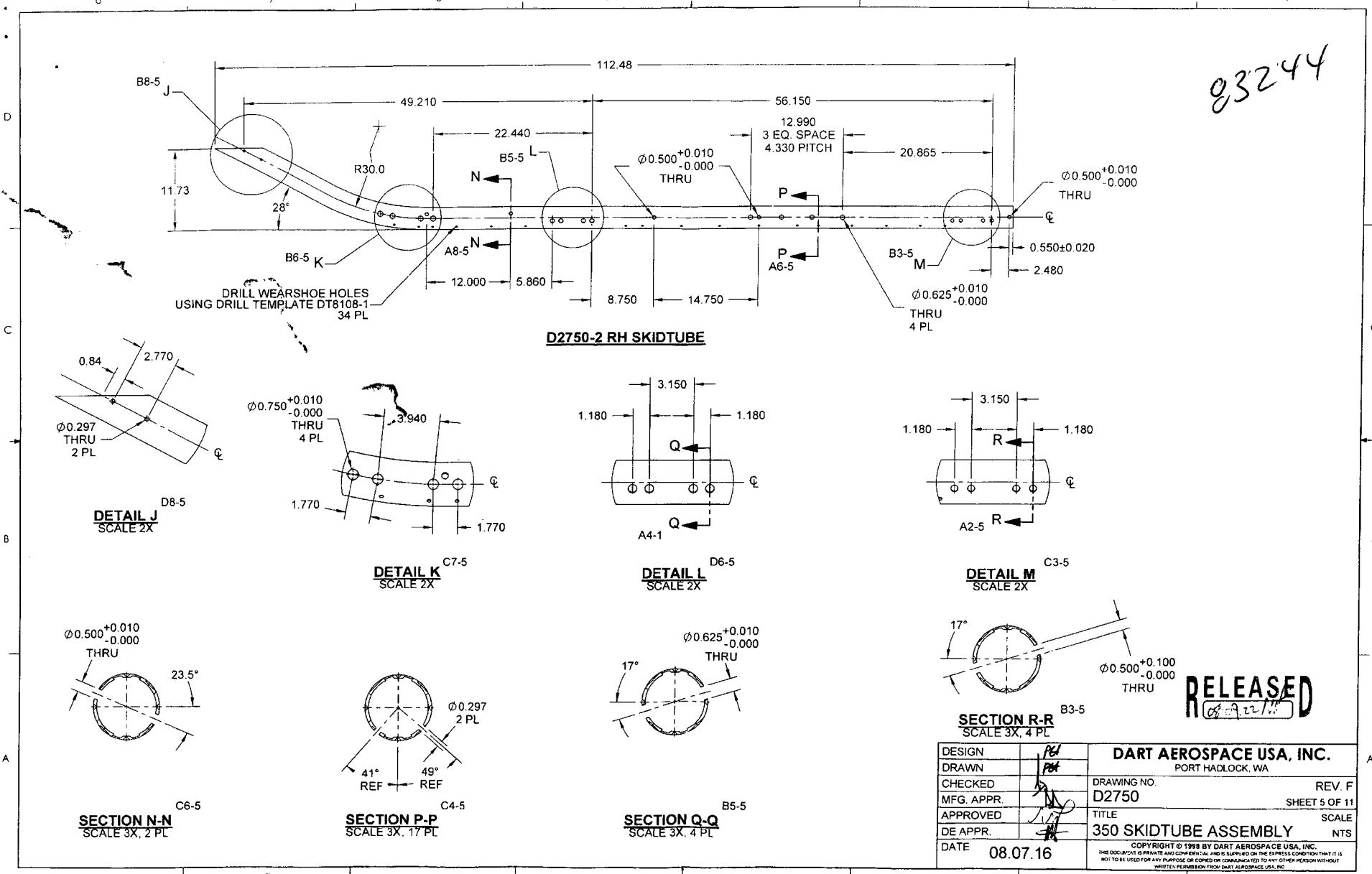
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



93244

5
RELEASED
08-22-11

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

PORT HADLOCK, WA

DESIGN	PSI	DART AEROSPACE USA, INC.		
DRAWN	PSI	PORT HADLOCK, WA		
CHECKED		DRAWING NO.	REV. F	
MFG. APPR.		D2750	SHEET 5 OF 11	
APPROVED		TITLE	SCALE	
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS	
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS		

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COMED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN APPROVAL FROM DART AEROSPACE USA, INC.

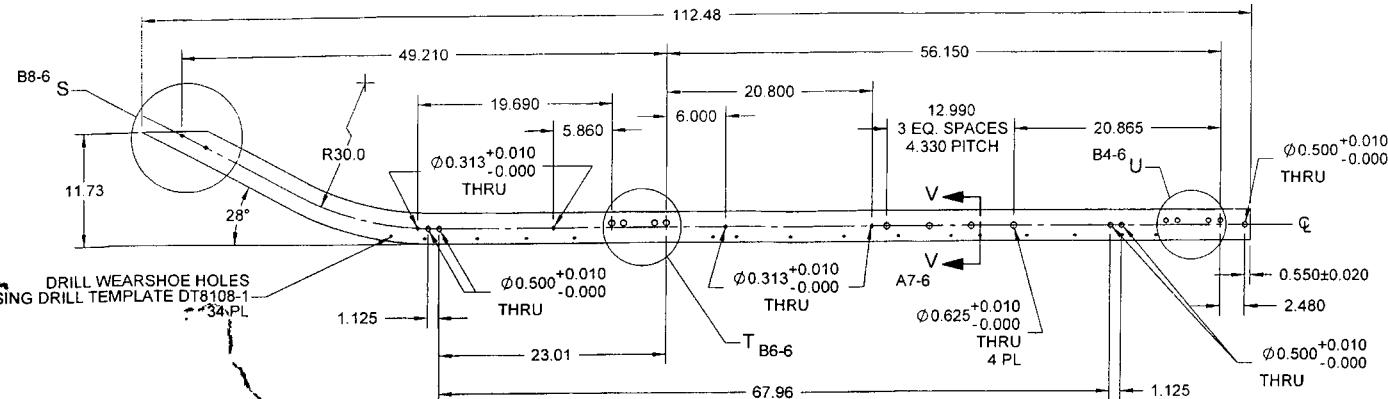
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

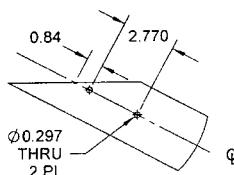
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

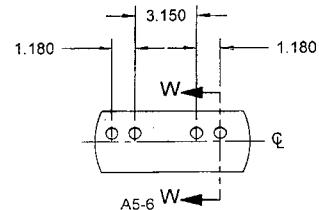
8 7 6 5 4 3 2 1



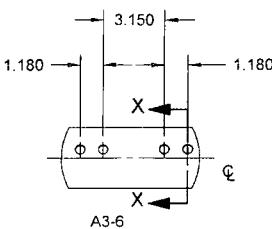
D2750-3 LH SKIDTUBE



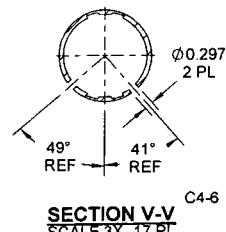
DETAIL S
SCALE 2X



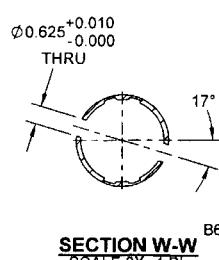
DETAIL T
SCALE 2X



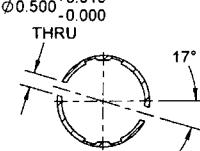
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

DESIGN	24	DART AEROSPACE USA, INC.
DRAWN	24	PORT HADLOCK, WA
CHECKED	24	REV. F
MFG. APPR.	24	DRAWING NO. D2750
APPROVED	24	SHEET 6 OF 11
DE APPR.	24	TITLE 350 SKIDTUBE ASSEMBLY
DATE	08.07.16	SCALE NTS

RELEASED
08-07-16

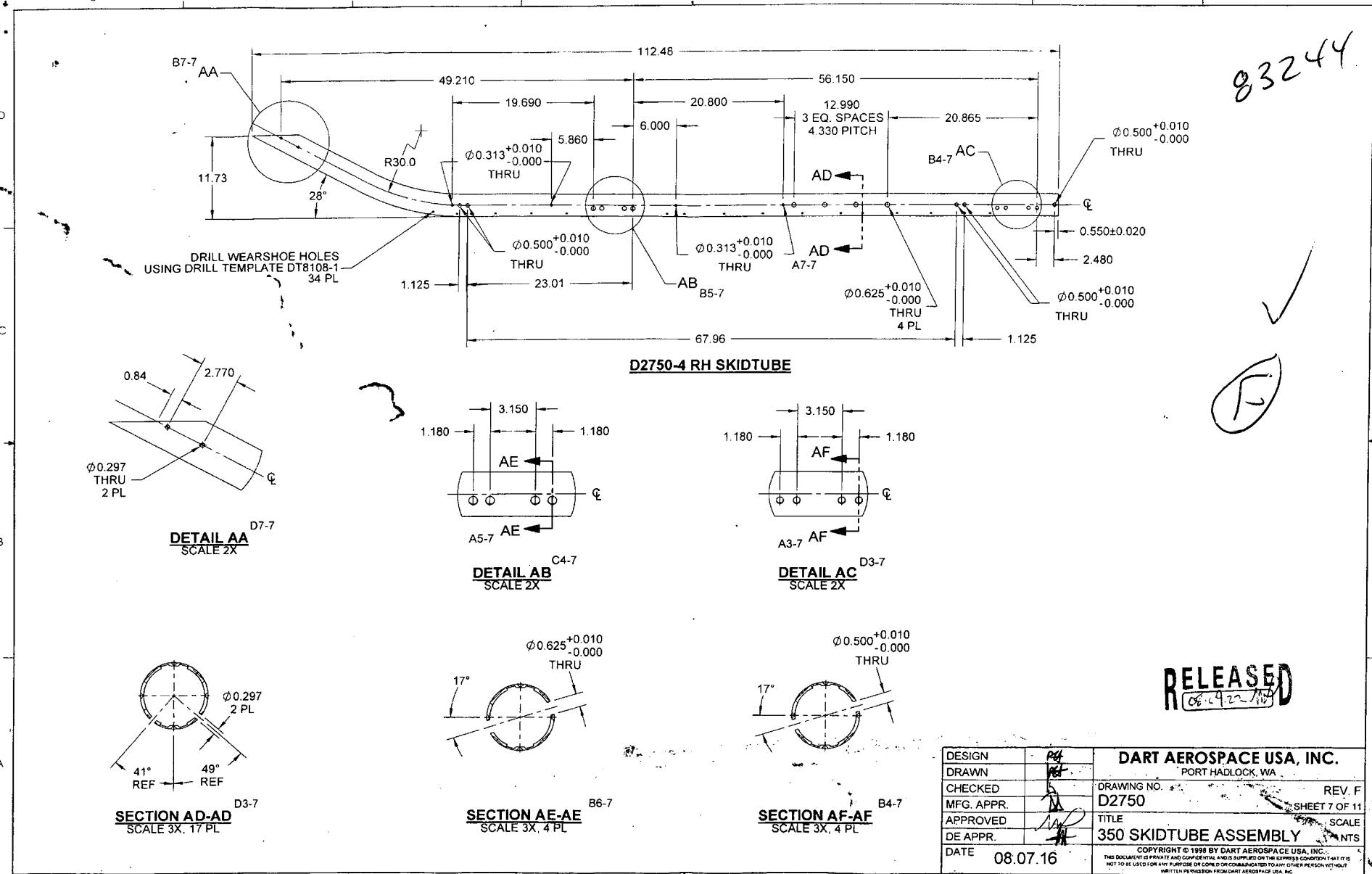
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASED
06-19-2018

DESIGN	PA4	DART AEROSPACE USA, INC.		
DRAWN	PA5	PORT HADLOCK, WA		
CHECKED	DA	DRAWING NO.	REV. F	
MFG. APPR.	DA	DA2750	SHEET 7 OF 11	
APPROVED	DA	TITLE	SCALE	
DE APPR.	DA	350 SKIDTUBE ASSEMBLY	INCHES	
DATE	08.07.16	COPYRIGHT © 1994 BY DART AEROSPACE USA, INC.		
THIS DOCUMENT IS PROPRIETARY MATERIAL AND IS SUPPLIED UNDER THE EXPRESS CONDITION IT IS NOT TO BE COPIED, REPRODUCED, OR DISCLOSED EXCEPT AS AUTHORIZED BY DART AEROSPACE USA, INC.				

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

BLACK ANTI-SKID
(INSTALL BOLT ON THIS SIDE)AN6C44A BOLT
D2745 BUSHING
D3631-1 WASHER
SKIDTUBE, REF
D3631-1 WASHER
D2745 BUSHING
MS21043-6 NUT
4 PLBOND D2739 WEB INTO D2750-1 OUTER TUBE
WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE
PER DART QSI 015
NOTE: ENSURE THAT HOLES LINE UP.

83244

A1-8

AG

D2750-1
SKIDTUBEAFTER FINISH,
ALS4-1032-225 INSERT
34 PL

AH

SECTION AJ-AJ

12

AJ

AK

AK

B5-8

AH

B7-8

A7-8

12

AL

2.0

TYP

1.78 TO
D2739 WEBD3488-041
BLADE FITTINGAN8C35A BOLT
D3793-3 WEARSHOE, REF
D3794-3 GASKET, REF
SKIDTUBE, REF
D3488-041 BLADE FITTING, REF
D3794-3 GASKET, REF
D3793-3 WEARSHOE, REF
AN960C816L WASHER
MS21083C8 NUT
(INSTALL BOLT ON THIS SIDE)

A7-8

AH

B5-8

AL

A4-8

AL

D3536-25
GASKETD3535-25
WEARSHOED3794-1
GASKETD3793-1
WEARSHOE

AN3C5A BOLT

AN960C10L WASHER

34 PL

D3537-1
WEARPADD3791-1
WEARPLATED2750-041 350 SKIDTUBE ASSEMBLY, LHD3490-3
SPACER

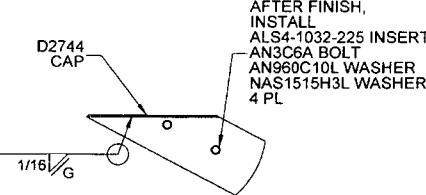
TYP

AFTER FINISH,
INSTALL
D3492-043
PLUG ASSEMBLY
BOTH ENDSWELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-3 SPACER (Ø 0.750 HOLES)
3) WELD INTO PLACE, GRIND FLUSHSECTION AH-AH
SCALE 3X, 4 PL

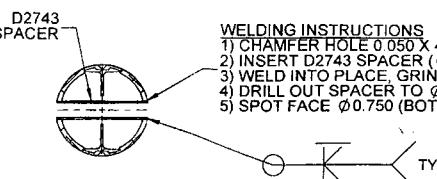
C7-8

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (Ø 0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO Ø 0.484SECTION AK-AK
SCALE 3X, 4 PL

C6-8

DETAIL AG D8-8
RELEASED
08.07.16D3490-3
SPACERWELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-1 SPACER (Ø 0.500 HOLES)
3) WELD INTO PLACE, GRIND FLUSHAFTER FINISH,
INSTALL
D3492-041
PLUG ASSEMBLY
BOTH ENDSSECTION AJ-AJ
SCALE 3X, 4 PL

C6-8, D5-8

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (Ø 0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO Ø 0.484
5) SPOT FACE Ø 0.750 (BOTH SIDES)SECTION AL-AL
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

C4-8

DESIGN	RE
DRAWN	RE
CHECKED	RE
MFG. APPR.	RE
APPROVED	RE
DE APPR.	RE
DATE	08.07.16

DART AEROSPACE USA, INC.
PORT HADLOCK, WADRAWING NO. D2750
REV. F
SHEET 8 OF 11TITLE 350 SKIDTUBE ASSEMBLY
SCALE NTSCOPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

8

7

6

5

4

3

2

1

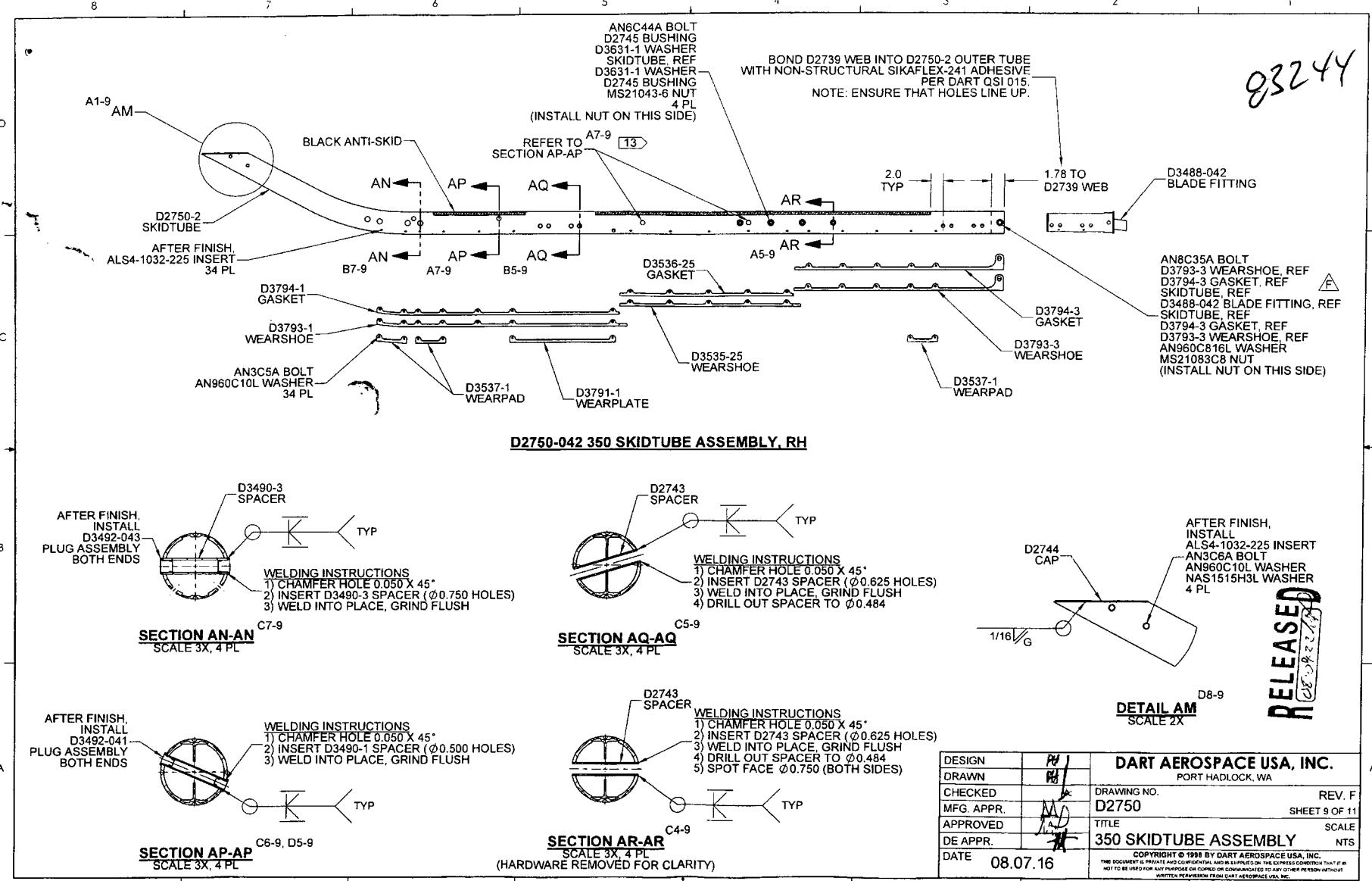
A

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

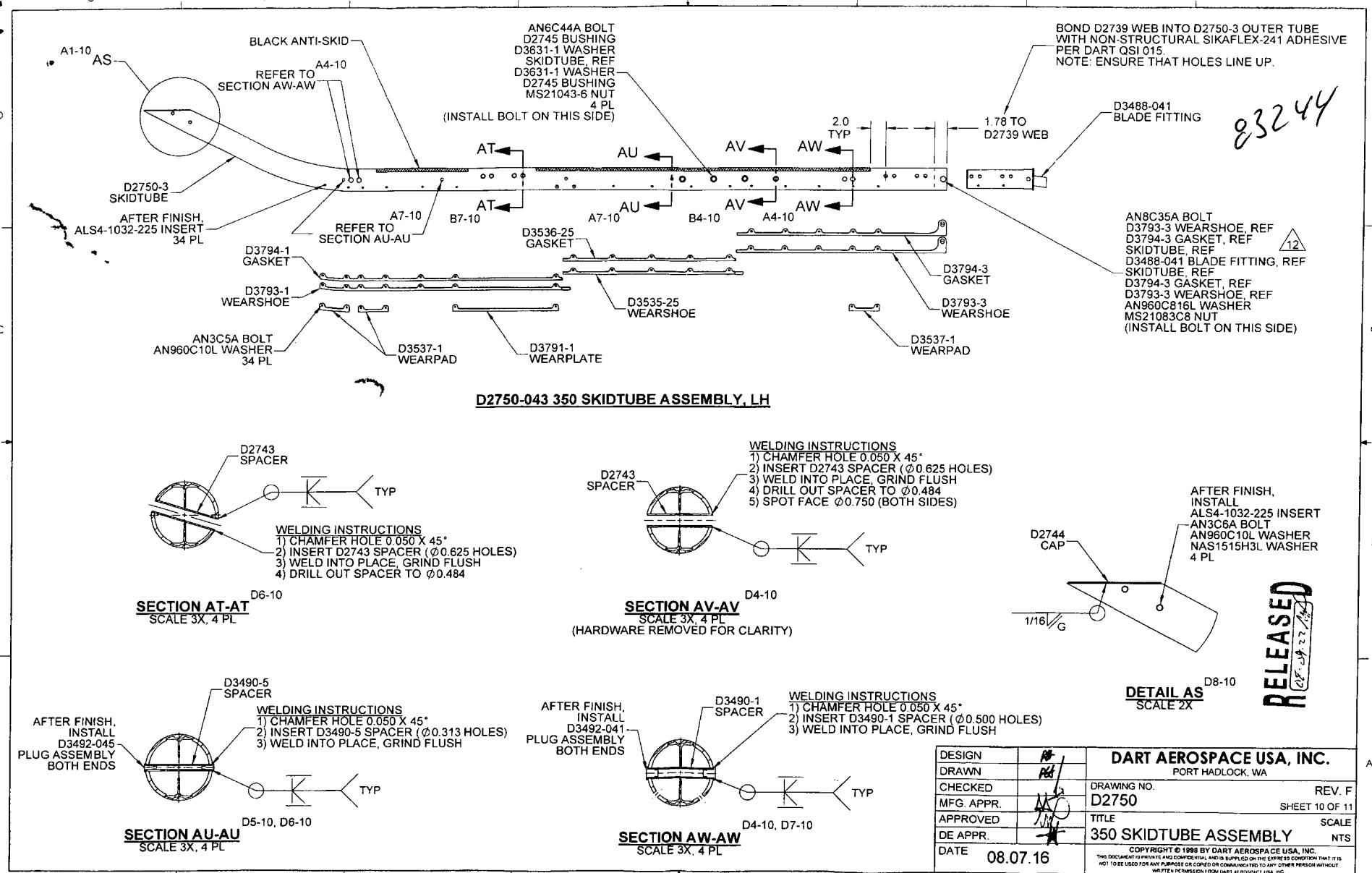


W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



83244

BOND D2739 WEB INTO D2750-3 OUTER TUBE
WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE
PER DART QSI 015.
NOTE: ENSURE THAT HOLES LINE UP.

AN8C35A BOLT
 D3793-3 WEARSHOE, REF
 D3794-3 GASKET, REF

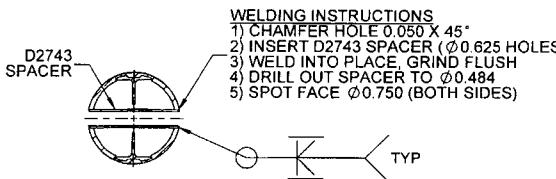
 SKIDTUBE, REF
 D3488-041 BLADE FITTING, REF
 SKIDTUBE, REF
 D3794-3 GASKET, REF
 D3793-3 WEARSHOE, REF
 AN960C16L WASHER
 MS21083C NUT
 (INSTALL BOLT ON THIS SIDE)

D2750-043 350 SKIDTUBE ASSEMBLY, LH



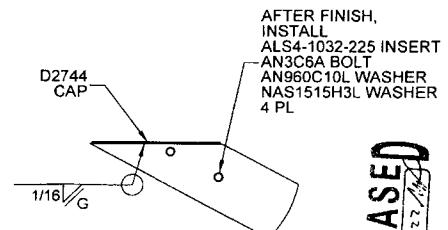
WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 X 45°
2) INSERT D2743 SPACER (ϕ 0.625 HOLES)
3) WELD INTO PLACE, GRIND FLUSH
4) DRILL OUT SPACER TO ϕ 0.484

SECTION AT-AT



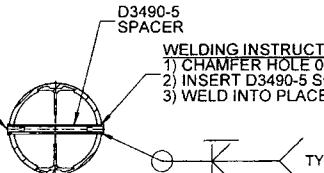
WELDING INSTRUCTIONS

- 1) CHAMFER HOLE 0.050 X 45°
- 2) INSERT D2743 SPACER (ϕ 0.625 HOLES)
- 3) WELD INTO PLACE, GRIND FLUSH
- 4) DRILL OUT SPACER TO ϕ 0.484
- 5) SPOT FACE ϕ 0.750 (BOTH SIDES)



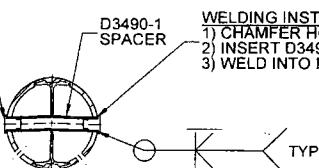
AFTER FINISH,
INSTALL
ALS4-1032-225 INSERT
AN3C6A BOLT
AN960C10L WASHER
NAS151H3L WASHER
4 PI

RELEASED 09-22-2014



WELDING INSTRUCTIONS

SECTION AU-AU



WELDING INSTRUCTIONS

1) CHAMFER HOLE 0.050 X 45°
2) INSERT D3490-1 SPACER (Ø 0.500 HOLES)
3) WELD INTO PLACE, GRIND FLUSH

SECTION AW-AW

DESIGN	<u>AB</u>	DART AEROSPACE USA, INC.		
DRAWN	<u>PSL</u>	PORT HADLOCK, WA		
CHECKED	<u>AC</u>	DRAWING NO.	REV. F	
MFG. APPR.	<u>AC</u>	D2750	SHEET 10 OF 11	
APPROVED	<u>AM</u>	TITLE	SCALE	
DE APPR.	<u>AM</u>	350 SKIDTUBE ASSEMBLY	NTS	
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT CONTAINS TRADE SECRET INFORMATION WHICH IS THE PROPERTY OF DART AEROSPACE USA, INC. NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE USA, INC.		

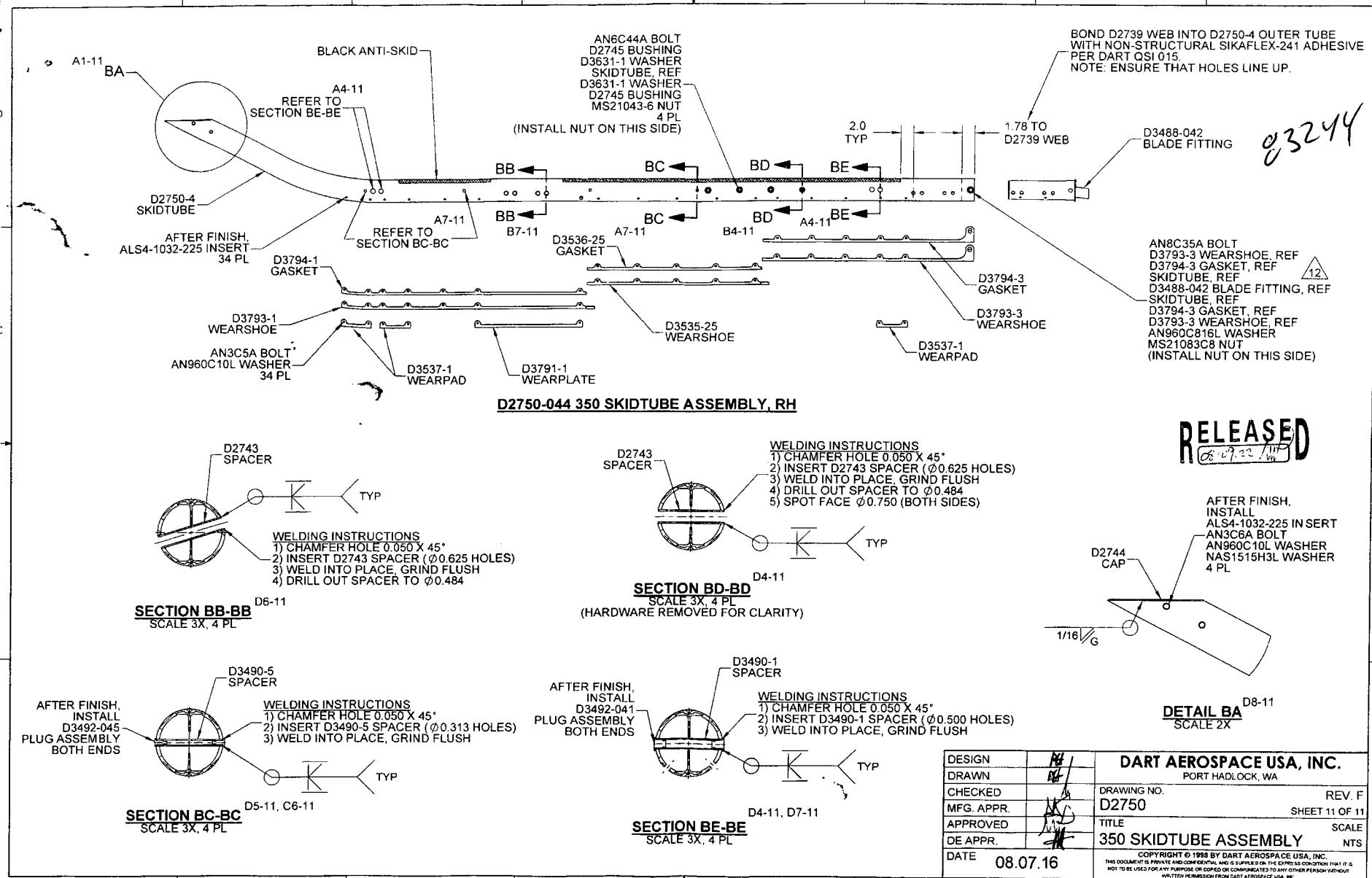
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 293

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 82796
Part number: A350-636-014
Description: Skid tube
Welding Process: Tig[] Mig[]
Base material: Alum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]
Undercut: pass[] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap): pass[] fail[]
Porosity (surface): pass[] fail[]
Coloration: pass[] fail[]

Qualifier David Elliott Date of Test Coupon 12-05-01

Welder Barclay Elliott Date of Test Coupon 12-05-01

The above named individual is qualified in accordance with AWS D17.1.2001 to weld